

LEAF ROT OF PHILODENDRON SELLOUM CAUSED BY ERWINIA CHRYSANTHEMI

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Philodendron selloum Kock, a native of Brazil, has large, dark-green, deeply-lobed leaves (1). This species is widely grown as an ornamental because of its attractive foliage.

Leaf rot was first found in Florida in 1953, and the causal agent was identified as *Erwinia chrysanthemi* Burkh. et al. The disease has appeared only sporadically over the last several years.

SYMPTOMS. The first symptoms of the disease are small, water-soaked lesions on the lower leaf surface. Under conditions of high humidity and high temperatures, the lesions enlarge rapidly to form large, water-soaked areas which collapse into a soft, slimy mass. When low temperatures and/or dry conditions prevail, the lesions become dry and yellow to tan, with definite yellow halos. When petioles are invaded, they become mushy and collapse (Fig. 1). Stems, crowns, and roots have never been reported to be attacked (2).



Fig. 1. *Erwinia chrysanthemi* on *Philodendron selloum*; A) plant with collapsed leaf; B) individual leaf showing rotted tissues as indicated by arrows.

CONTROL. Spread of the pathogen in nurseries is by leaf contact, splashing water, and indiscriminate handling of diseased and healthy plants. Sanitation, such as roguing diseased plants and using healthy seedlings and clean soil, is the best means of control. Agrimycin 100 at 200 ppm active ingredient has given control when applied as a protective spray on healthy plants. Where the disease was present, this material gave effective control (2) when applied at 4-day intervals.

Literature Cited

1. Graf, A. B. 1959. Exotica II. Roehrs Co., Rutherford, N. J. 1146 p.
2. Miller, H. N., and L. A. McFadden. 1961. A bacterial disease of philodendron. Phytopathology 51:826-831.